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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/923,369	09/03/1997	SHIGEAKI KOIKE	SONY-C5757	2545

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EXAMINER

BOCCIO, VINCENT F

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 04/02/2003

27

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No. 08/923,369	Applicant(s) Koike et al.
Examiner Boccio, Vincent	Art Unit 2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on Jan 28, 2003
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 10-13, 15, 16, 21, 22, 24, 25, and 27-30 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 10-13, 15, 16, 21, 22, 24, 25, and 27-30 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some* c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103[®] and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 10-13, 15-16, 21-22, 24-25 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang (US 5,164,839) in view of Takada et al. (US 5,715,104), as applied and further in view of Honjo (5,432,769).

Regarding claims 10-12, 15-16, 21, 24 and 27-30 Lang discloses and meets the limitations as recited, with respect to Fig. 2,

- a video data recording and reproducing system for editing a source of video data (see col. 2, lines 29-38), said system comprising:
 - a video tape recording means (see col. 3, lines 51-53, "...AVRU 11 may be a VCR...") for recording onto a tape medium with a first data rate ("real time input rate, from one of the sources");

o a disc recording means(see col. 6, lines 28-42), editing means and control means for controlling the Disc and VTR, functions such as recording from an external source, internal transfers, reproducing to various external unit mediums etc., editing internally and/or in combination with an external source, thereby controlling reproduction operation such as editing portions designated by an editing operation by the user thru user interface(see Fig. 1, control panels, switches or user interface controls etc.), reproduction/transmission, compression and format conversion {such as to RGB etc.} of received video and editing and handling of audio(see col. 1-2 and col. 5, line 40 to col. 8, line 59).

Note: "VCR-ET" is shown in Fig. 1, comprising elements, such as, shown in Figs. 1 A and 2-4 and is the editing system or unit itself.

It is clear **in the digital environment**, Lang can provide high speed input/output of information to and from VCR-ET-10 as seen in Fig. 1, and discloses the utilization of a conventional VCR or video tape recording means, being an analog VCR.

Lang discloses an AUX Digital Input-17 in Fig. 2, to the high speed data bus and further discloses the ability to transfer information to and from the high speed bus at high transfer rates.

Lang, fails to clearly and specifically describe wherein the video tape recording apparatus or VCR and associated tape medium is capable of transferring recorded information at high speed or higher than a real time rate to the disc recording means and vice versa.

It is clear that, due to the limitation of the A/D conversion process, for converting analog video signals to digital in the era of Lang(1988), that commercially available high speed A/D converters can be provided, but the disclosure only associates 30 frames/sec transfers from the analog VTR-AVRU-11 to the disc recording means-13(see col. 4, line 64 to col. 5, line 15).

Lang further discloses that the recording and reproducing means, AVRU-11, can be a digital recording and reproducing unit(see col. 3, line 61 to col. 4, line 43), thereby providing a strong suggestion to utilize a digital device, such as a digital VCR, wherein the transferring video and/or audio in digital form to and from the digital AVRU-11, and suggests the desire for high speed greater than real time, of video etc., information from the to the system as disclosed.

Takada et al., teaches in Fig. 3, an apparatus performing the process of high speed dubbing, utilizing a D-VTR(see Abstract and col. 3, lines 1-4), wherein the digital signals are in digital form(see Fig. 3, and col. 15, lines 1-35, digital signal

dubbing input and output) and further discloses controlling by providing synchronization signals, from one unit, being a master reproducing unit, to a recording unit being a slave recorder, for performing dubbing at N fold speed reproduction and recording or high speed dubbing(see col. 16, lines 20-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lang by replacing the "AVRU-11 being a conventional analog VCR associated with media-23", with, "the digital tape recording apparatus and associated tape medium, having advantages of providing higher transfer rates or high speed dubbing N fold speeds as taught by Takada et al., as suggested by Lang, thereby decreasing the amount of time required to transfer video and/or audio from tape recording and reproducing means or the AVRU-11 replaced with the high speed digital VTR, to the disc recording and reproducing means or memory unit-13 and vise versa, from the disc to the tape in any N-fold speed configuration to and from the two recording and reproducing means etc.(Tape and Disc of Lang).

Regarding claims 13, 22 and 25 and the combination applied meets the limitations of the first operation mode, for recording and reproducing in the first data rate and second data rate(N-fold speed and high speed transfers), between the disc and VTR

and vise versa, wherein the editing means or controller(see CPU, controller and ROM unit-14 in Fig. 2).

Regarding claims 14, 23 and 26, the combination of Lang and Takada et al. further meet the limitation of a transfer means(see Fig. 2, "High Speed Bus-34") for transferring the reproduced video data from the tape recording means(Takada et al.), and said edited video data reproduced from the disc recording means.

Regarding claim 27, the combination further discloses, a video interface circuit for receiving said source video data(see Fig. 2); and a digital interface circuit for outputting edited video data(see Fig. 2, from Bus-34 to Audio/Video Tran/Rec. unit-22).

Further regarding claims 10-11 and 16, etc., the combination of Lang and Takada further meets the recited limitations of:

a digital transfer circuit as claimed(see office action 9/23/02, Paper# 24), see previous office action, incorporated herein by reference.

The combination as applied, Lang in view of Takada, rendered an obvious combination, therefore, a Prima Facie Case of Obviousness (by the Board of Appeals Rendered Decision on 6/29/02, incorporated herein by reference).

Regarding amended claims 10-11, 16 and 28-30, the combination as applied with respect the claims, fails to teach the feature of,

o input and output buffering means, associated with the recited transfer circuit, being an interface between two devices, wherein the buffering means controls, recording and reproduction of the disc recording means, according to the remaining capacity of at least one buffering means for buffering the digital video data,

wherein upon reproduction from the disc to the buffer, wherein when the buffer either, has or goes low or less than a threshold amount of data or

o upon being lower than a predetermined lower limit setting, reproduction is activated, to fill the buffer, thereby not to loose data or not to underflow the buffer,

further the controller stops the reproduction to from the disc to the buffer upon the reaching a predetermined upper limit, or

o when the capacity of the buffer reaches a predetermined upper limit, thereby not to overflow the buffer.

Honjo teaches, in a recording and reproduction system and method, utilizing a buffer means, buffer level detecting circuit, controlling recording to the disc, as well as reproduction from the disc based on buffer data amount levels, to and from the disc type medium(Figs. 1 and 4), wherein reproduction control is based on buffer fullness:

reproduction is stopped when the storage level in the buffer, "is larger than a predetermined value", col. 4, lines 16-22, and wherein, "stopped until the amount of the data in the buffer is smaller than the predetermine level",

therefore, upon being smaller than a predetermined value, data is reproduced or, "start reproduction", from the disc to the buffer(col. 4, lines 12-17),

further Honjo teaches, controlling the disc reproduction and recording and controlling the recording and reproduction detecting buffer fullness and halting and resuming based on buffer fullness, wherein the data bandwidth compressed, variable length coded, Video data for example(cols. 1-3), as taught by Honjo.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the combination by incorporating input and output buffering to the transfer means coupled between the devices Disc and VTR, buffering, as necessary the data being reproduced from the disc and controlling reproduction in accordance with buffer fullness, as taught by Honjo.

Response to Arguments

3. Applicant's arguments with respect to all amended independent claims etc., have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Fax Information

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communication intended for entry)

or:

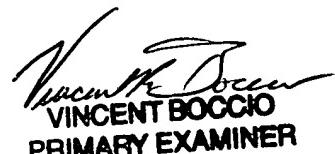
(703) 308-5359, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Contact Information

5. Any inquiry concerning this communication or earlier communications should be directed to the examiner of record, Vincent F. Boccio (703) 306-3022. If any attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Andy Christensen (703) 308-9644. Any inquiry of a general nature or relating to the status of this application should be directed to Customer Service (703) 306-0377.

Primary Examiner, Boccio, Vin
April 2, 2003


VINCENT BOCCIO
PRIMARY EXAMINER